

February 5, 2008

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-III-08-001B

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region III staff on this date.

<u>Facility</u>	<u>Licensee Emergency Classification</u>
Point Beach Unit 1	<input checked="" type="checkbox"/> Notification of Unusual Event
FPL Energy Point Beach, LLC	<input type="checkbox"/> Alert
Two Creeks, WI	<input type="checkbox"/> Site Area Emergency
Docket: 50-266; License: DPR-24	<input type="checkbox"/> General Emergency
	<input type="checkbox"/> Not Applicable

SUBJECT: POINT BEACH UNIT 1 NOTIFICATION OF UNUSUAL EVENT  
DUE TO LOSS OF OFFSITE POWER TO VITAL BUSES,  
UPDATE

This is an update to PNO-III-08-001A, issued on January 17, 2008.

At 2:04 p.m. (CST) on January 15, 2008, one of the Point Beach Unit 1 electrical transformers failed, causing a loss of power to both Unit 1 vital 4160-volt busses. Unit 1 and Unit 2 remained at full power during the electrical transient. All four emergency diesel generators (EDGs) (2 from each unit) started as designed. Neither of the Unit 2 EDGs were required since Unit 2 was unaffected by the electrical transient and were subsequently shut down by plant operators. The Unit 1 EDGs remained in operation and supplied both 4160-volt vital busses. For approximately six hours after the transient, the B-Train 480-volt vital bus was not energized, due to the spurious opening of the supply breaker during the electrical transient. Power via the Unit 1 EDGs was reestablished to the B-Train vital bus, after the licensee had performed troubleshooting activities to confirm that neither the bus nor the cables to the bus were faulted.

The licensee declared a Notification of Unusual Event (NOUE) at 2:15 p.m. (CST) in accordance with its emergency plan for the loss of power to a transformer that results in the loss of all offsite power to both vital busses for greater than 15 minutes and in both vital busses being powered from EDGs. Both resident inspectors were on site and responded to this event. At 3:49 p.m. on January 16, 2008, the licensee began a controlled shutdown of Unit 1, and completed it at 7:47 p.m. when the reactor entered Mode 3 (Hot Standby). The licensee exited the NOUE at 8:35 p.m. The resident inspectors, augmented by inspectors from the nearby Kewaunee Nuclear Station, monitored the licensee's activities continually, from the beginning of the event until the licensee exited from the NOUE.

Following the shutdown of the reactor, the licensee began an extensive investigation. As part of its investigation, the licensee identified that the transformer had tripped offline, as designed, when an underground cable associated with the transformer developed an electrical short. Subsequent laboratory examination of the cable indicated that the cable shorted because of degradation of the cable's insulation due to submergence in water. The cable was initially installed during the construction of Point Beach in the late 1960s/early 1970s and has had a history of submergence in groundwater. As part of its corrective action, the licensee verified the correct functioning of the transformer and installed new cables aboveground between the transformer and the auxiliary building to replace the shorted cable and other underground cables that shared a common passageway with the shorted cable. These cables were of a similar insulation type and age as the failed cable and were also potentially subject to repeated submergence in water. The licensee conducted an extensive review of other underground cables at the site and did not identify any similarly susceptible cables. However, the licensee has increased its routine inspection of underground cable passageways (via manholes) to ensure

that groundwater is maintained below the level of the cables and will be conducting additional testing to identify degraded cables during refueling outages scheduled for later this year.

An NRC special inspection team monitored much of the licensee's troubleshooting and repair activities late in January. Also, discussions were held between NRC officials and inspectors and the licensee management and technical staff on February 1 and 2 to address several questions on the licensee's investigation and repair activities prior to the licensee's planned restart of Unit 1. These questions were satisfactorily addressed by the licensee and at 2:32 p.m. (CST) on February 3, 2008, operators restarted the Unit 1 reactor. As of February 5, 2008, the reactor was at 70 percent power. During the week of February 11, 2008, the NRC special inspection team will complete its review of the licensee's investigation and repair activities.

The State of Wisconsin was informed.

The information in this preliminary notification has been reviewed by the licensee.

This information is current as of 8:00 am CST on February 5, 2008.

CONTACT: Mike Kunowski  
(630) 829-9618

Diana Betancourt-Roldan  
(6300-829-9617